

PRINTED BANDPASS FILTER FOR A DOUBLE CONVERSION TUNER

ABSTRACT OF THE DISCLOSURE

A printed bandpass filter is mounted on a precision substrate to eliminate the need for post-fabrication tuning. The filter input is capacitively coupled to a series of quarter wavelength resonators and the filter output. The quarter wavelength resonators are printed as spirals to reduce filter size. The resonators define the bandpass characteristics of the filter. The filter also weakly couples the input signal to the filter output in a manner to cancel the signal image. Mechanical clips mitigate thermal stress on solder connections when the precision substrate mounted on a second printed circuit board.